

(b) a protein encoded by a DNA that hybridizes with a DNA comprising the nucleotide sequence of SEQ ID NO: 1

(c) a protein comprising the amino acid sequence of any one of SEQ ID NOs: 2 to 4.

2. ^{An isolated} A DNA encoding the protein of claim 1.

3. A vector into which the DNA of claim 2 is inserted.

4. A method for producing a protein, wherein said method comprises the steps of culturing a host cell containing the DNA of claim 2, and collecting from the cell or its culture supernatant, a recombinant protein expressed from the DNA within the cell.

5. An antibody against the protein of claim 2.

6. A partial peptide of the protein of claim 2.

7. A method for screening a compound that binds to the protein of claim 2, comprising the steps of:

- (a) contacting a test sample with the protein or a partial peptide thereof,
- (b) detecting the binding activity between the test sample and the protein or the partial peptide thereof, and
- (c) selecting a compound that has an activity to bind to the protein or the partial peptide thereof.

8. A compound that binds to the protein of claim 2.

A5 14. A method for screening a compound that promotes or inhibits the peptidase activity of the protein of claim 2, comprising the steps of:

- (a) contacting the protein of claim 2 with its substrate in the presence of a test sample,
- (b) detecting the cleavage of the substrate, and
- (c) selecting a compound comprising the activity to increase or decrease substrate cleavage caused by the protein of claim 2, in comparison to the cleavage in the absence of the test sample (control).

09980881.032802 A6 16. A compound comprising the activity to promote or inhibit peptidase activity of the protein of claim 2.

17. The compound of claim 16, wherein said compound is isolated by the method of claim 14.

18. An A β production regulator, comprising the protein of claim 2 as an active ingredient.

19. A drug for treating a disease that causes accumulation of A β in the brain, wherein said drug comprises the protein of claim 2 as an active ingredient.

A7 21. An A β production regulator, comprising a compound of claim 12 as an active ingredient.

22. A drug for treating a disease that causes accumulation of A β in the brain, comprising a compound of claim 12 as an active ingredient.

A8 24. A kit for screening a compound that promotes or inhibits peptidase activity of the protein of claim 2, wherein said kit comprises the protein of claim 2.

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